



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/080,564      | 02/25/2002  | Tetsu Takahashi      | 1614.1218           | 8623             |

21171 7590 01/04/2007  
STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

|          |
|----------|
| EXAMINER |
|----------|

HASAN, SYED Y

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2621

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 01/04/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/080,564

Applicant(s)

TAKAHASHI, TETSU

Examiner

Syed Y. Hasan

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 4, 8 - 15 and 19 - 22 is/are rejected.
- 7) ☒ Claim(s) 5 - 7, 16 - 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 02/25/2002 S.Y.H.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities:

(1) On page 5, line 17, change "output terminal 31 " to "output terminal 32" as shown in figure 1.

(2) On page 5, line 31, change "NTSC decoder 15" to "NTSC decoder 12" as shown in figure 1.

(3) On page 14, line 1, change "SRAM 126" to "SDRAM 126" and change "output terminal 130" to "input terminal 130" as shown in figure 5.

(4) On page 14, line 3, there is a mention of "a remote controller input part 131" as shown in figure 5. Also shown in figure 5 is composite video amp output "131". One of these numbers has to be changed.

(5) On page 14, line 13, change "stream output interface 125h" to "stream output interface 125k" as shown in figure 5.

(6) On page 14, line 13, mention is made to "a remote controller, not shown in the figure" whereas in line 3 reference is made to "a remote controller input part 131" as shown in figure 5.

(7) On page 15, line 18, reference is made to "output terminal 131" which conflicts with "a remote controller part 131" mentioned in para 0067 above.

Appropriate correction is required.

### ***Drawings***

2. The drawings are objected to because figure 5 references to a remote controller "131" and a composite video amp output "131". One of these numbers need to be changed.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 – 4, 8 - 9, 12 – 15 and 19 - 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Hatanaka et al (US 6397000)

Regarding claims 1 and 12, Hatanaka et al discloses, an image recording apparatus comprising:

a coding (fig 1, 10, col 2, line 39, MPEG Decoder)/decoding (fig 1, 11, col 2, line

40, NTSC Encoder) part performing coding and decoding a given signal in one of a plurality of coding/decoding modes of different bit rates (fig 9, col 8, lines 37 – 44, SP, EP and LP modes)

a recording medium (fig 1, 2, col 2, lines 34 – 35, a recording/playback device) coupled with said coding/decoding part (fig 1, 10 and 11 from above); and

a control part (fig 1, 18, col 2, lines 43 – 44, a packet control circuit) setting a predetermined bit rate (fig 9, col 8, lines 37 – 44, SP, EP and LP modes) to be applied by said coding/decoding part in case the given signal is output after being coded and decoded by said coding/decoding part without storage (col 7, lines 21 – 24, illustrating that this embodiment provides a coding/decoding part without storage) thereof in said recording medium.

Regarding claims 2 and 13, Hatanaka et al discloses the image recording apparatus, wherein the predetermined bit rate is that on such a mode of the plurality of coding/decoding modes as to provide the highest image quality (fig 9, col 8, line 40 – 41, triple mode(EP mode))

Regarding claims 3 and 14, Hatanaka et al discloses the image recording apparatus, wherein the predetermined bit rate is further higher than that on such a mode of the plurality of coding/decoding modes as to provide the highest image quality (fig 9, col 8, line 40 – 41, triple mode(EP mode))

Regarding claims 4 and 15, Hatanaka et al discloses an image recording apparatus comprising:

a coding/decoding part performing coding and decoding a given signal in one of

a plurality of coding/decoding modes of different bit rates (rejected based on claim 1 above)

a recording medium coupled with said coding/decoding part (rejected based on claim 1 above) and

a control part automatically setting a predetermined bit rate to be applied by said coding/decoding part according to a predetermined parameter concerning recording of the given signal to be recorded into said recording medium (fig 9, col 8, lines 44 – 51, system automatically detects the setting)

Regarding claims 8 and 19, Hatanaka et al discloses an image recording apparatus comprising:

a coding/decoding part performing coding and decoding a given signal in one of a plurality of coding/decoding modes of different bit rates (rejected based on claim 1 above)

a recording medium coupled with said coding/decoding part (rejected based on claim 1 above); and

a control part causing an input image signal to be automatically recorded into said recording medium even if no instructions for recording the input image signal is given (fig 9, col 8, lines 52 – 58, system automatically records without instructions) and causing the image signal thus recorded into the recording medium to be accessible when predetermined instructions concerning the image signal is given. (fig 9, col 8, lines 59 – 67, image signal is accessible when instructions are provided)

Regarding claims 9 and 20, Hatanaka et al discloses the image recording

apparatus, wherein said control part does not perform the automatic recording of the image signal when the remaining storage capacity of the recording medium is less than a predetermined value (fig 9, col 8, lines 52 – 58, automatic recording of digital signal is prohibited)

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10 – 11 and 21 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatanaka et al (US 6397000) and further in view of Yoshida et al (US 2003/0120942).

Regarding claims 10 and 21, Hatanaka et al teaches all of the above except the image recording apparatus, wherein said control part causes the image signal to be automatically recorded into a file, which a user cannot access, of the recording medium

However, Yoshida et al teaches the image recording apparatus, wherein said control part causes the image signal to be automatically recorded into a file (page 36, 0837, automatically starts the recording operation) which a user cannot access, (page 19, para 0485, the system FAT 42 is a system region that the user cannot access and is a region such as for file management information where the control means 14 utilizes in order to control the system) of the recording medium

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate control part of the image recording apparatus causing the image signal to be automatically recorded into a file which a user cannot access, of the recording medium as taught by Yoshida et al in the system of Hatanaka et al in order to cut back user intervention to record automatically and prevent unauthorized copying by preventing user access to restricted files.

Regarding claims 11 and 22, Hatanaka et al teaches all of the above except the image recording apparatus, wherein control information concerning the image signal is divided and recorded into the recording medium in a directory area thereof and also an area thereof in which the image signal is stored separately

However, Yoshida et al teaches the image recording apparatus as claimed in claim 8, wherein control information concerning the image signal is divided and recorded into the recording medium in a directory area thereof and also an area thereof in which the image signal is stored separately (page 20, para 0493, whenever the recording of the AV data in a new recording unit is completed, the control means 14 produces or updates the file management information that indicates in which recording unit the AV data is recorded. Then, this file management information is stored in its own memory)

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the image recording apparatus as claimed in claim 8, wherein control information concerning the image signal is divided and recorded into the recording medium in a directory area thereof and also an area thereof in which the



image signal is stored separately as taught by Yoshida et al in the system of Hatanaka et al in order to provide improved control of the file in case accidental erase of data occurs. In this case the control file is still accessible to reproduce data.

***Allowable Subject Matter***

7. Claims 5 – 7 and 16 – 18 are objected as being dependent on a rejected base claim, but would allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and amended to overcome the rejection(s) under 35 U.S.C. 102 set forth in this Office action.

Regarding claims 5 and 16, the prior art of record fails to teach, disclose or fairly suggest as recited in claim 5, the prior art fails to disclose the image recording apparatus, wherein:

the predetermined parameter includes a remaining storage capacity A (bytes) of said recording medium;

a time T (seconds) of recording reserved;

a maximum available recording bit rate  $R_{max}$  (bps); and

a minimum available recording bit rate  $R_{min}$  (bps); and

said control part determines the bit rate R (bps) by which the recording is performed such as that satisfying the following formula:  $T \cdot R \leq A$  wherein,  $R = R_{max}$  when  $R > R_{max}$ ; and  $R = R_{min}$  when  $R < R_{min}$ .

Regarding claims 6 and 17, the prior art of record fails to teach, disclose or fairly

suggest as recited in claim 6, the prior art fails to disclose the image recording apparatus, wherein:

the predetermined parameter includes a remaining storage capacity A (bytes) of said recording medium; and

said control part lowers the bit rate by which the recording is performed when the remaining storage capacity A is less than a predetermined value.

Regarding claims 7 and 18, the prior art of record fails to teach, disclose or fairly suggest as recited in claim 7, the prior art fails to disclose the image recording apparatus, wherein:

the predetermined parameter includes a remaining storage capacity A (bytes) of said recording medium;

a time T (seconds) of recording reserved; and

a minimum available recording bit rate  $R_{min}$  (bps); and

said control part determines the bit rate R (bps) by which the recording is performed such as that satisfying the following formula:  $T \cdot R \leq A$  wherein  $R = R_{min}$  when  $R < R_{min}$ .

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

Shimoda et al (US 5289190) discloses a recording/reproducing apparatus including control signal indicating high-efficiency coding.

Maturi (US 5694332) discloses a MPEG audio decoding system with subframe input buffering.

Ikeda (US 6240244) discloses a disk apparatus having a single recording head and capable of simultaneous recording and reproducing.

Morioka et al (US 6226443) discloses a recording and reproducing apparatus.

Mitsuno (US 6219311) discloses a disc recording method and device, and disc like recording medium.

Cheung et al (US 6538656) discloses a video and graphics system with a data transport processor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed Y. Hasan whose telephone number is 571-270-1082. The examiner can normally be reached on 9/8/5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Application/Control Number: 10/080,564

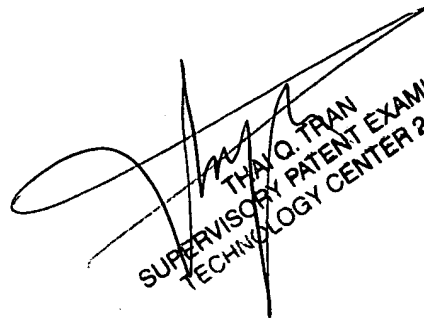
Page 11

Art Unit: 2621

Customer Service Representative or access to the automated information system, call  
800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.Y.H.

12/14/2006



THUY Q. TRAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600